

Expanding 2

Name: Due date:/...../.....


For 1–5, expand and simplify.

1 $3(4l - 1) - 5(2l + 3)$
[Expand: distributive law] _____

2 $a(b - 1) + b(a + 3)$
[Expand: distributive law] _____

3 $3x(y - 4) - 2x(y + 5)$
[Expand: distributive law] _____

4 $2c(c - 4) - c(5c - 7)$
[Expand: distributive law] _____

5  $m^2(5m^2 + 3m) + 2m(m^3 - 7m)$
[Expand: distributive law] _____

For 6–14, expand and simplify the binomial factors.

6 $(b + 5)(b + 3)$
[Expand: binomial] _____

7 $(c - 8)(c + 4)$
[Expand: binomial] _____

8 $(3x - 4)(x - 5)$
[Expand: binomial] _____

9 $(2y + 9)(3y - 1)$
[Expand: binomial] _____

10 $(6p - 1)(3p + 4)$
[Expand: binomial] _____

11 $(2 - 5z)(5 - z)$
[Expand: binomial] _____

12 $(4m + 1)(7 - m)$
[Expand: binomial] _____

13 $(x + 5)(3y + z)$
[Expand: binomial] _____

14 $(4q - r)(3q - 2s)$
[Expand: binomial] _____

For 15–20, expand the perfect squares.

15 $(x + 3)^2 = x^2 + \underline{\hspace{2cm}}x + 9$
[Expand: perfect square]

16 $(x + 5)^2$
[Expand: perfect square] _____

17 $(m - n)^2$
[Expand:
perfect
square]

18 $(2x - 1)^2$
[Expand:
perfect
square]

19 $(5x + 3)^2$
[Expand:
perfect
square]

20 $(7a - 2b)^2$
[Expand:
perfect
square]

21 Which of the following represents a
[Difference difference of two squares expression?
squares]
 $a^2 - 2ab + b^2$ $a^2 + b^2$
 $a^2 - b^2$ $a - b$

For **22–25**, expand and simplify using the difference
of two squares rule.

22 $(y - 9)(y + 9)$
[Expand:
difference
squares]

23 $(3x + 4)(3x - 4)$
[Expand:
difference
squares]

24 $(7 + 11t)(7 - 11t)$
[Expand:
difference
squares]

25 $(5d - 3b)(5d + 3b)$
[Expand:
difference
squares]

For **26–29**, expand and simplify.

26 $(x + 4)(x + 1) + (x + 3)(x + 1)$
[Expand:
mixed]

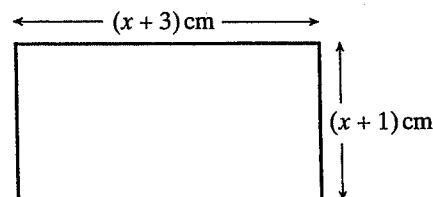
27 $(d + 9)(d - 3) + (d - 2)(d - 7)$
[Expand:
mixed]

28 $(t - 5)^2 - (t - 7)(t - 2)$
[Expand:
mixed]

29 $(l + 9)(l - 3) + (l - 4)(l + 4)$
[Expand:
mixed]

30 
[Application]

A rectangle has side lengths $(x + 1)$
and $(x + 3)$ cm. Write an expression,
in simplest form, for the area of the
rectangle.



Student comment	Guardian comment/signature	Teacher feedback